



June 2008

DEPARTMENT OF EDUCATION
2007–2008 School Year Reports

Dear School Board Members and School Personnel:

The Maine Educational Assessment (MEA) is the State's measure of student progress in achieving the State standards known as *Learning Results*, adopted by the Maine Legislature in 1997. These *Learning Results* established goals for what all students should know and be able to do at certain times in their school careers and are the basis for Grade Level/Span Expectations, which describe the assessment standards for each grade. The MEA is administered to students in all grades 3 through 8 to meet state assessment requirements and the requirements of the federal *No Child Left Behind Act*.

The 2007-2008 MEA summary reports contain the results of student achievement in reading and mathematics at all grades, science and technology at grades 4 and 8, and writing at grade 5 based on achievement standards set in 2006 and disaggregated by student and school characteristics. This report, together with MEA individual student and subject-specific class analysis reports, provides support for use in program evaluation and planning.

MEA results reflect scores based on test questions that are taken in common by the approximately 15,000 students in each grade level. Students' scores in each content area are based on answers to a combination of multiple-choice questions and questions that require students to construct an answer. The grade 5 writing reports provide information on a student's ability to respond to a prompt measuring narrative writing. More information about the design of the MEA is available at www.maine.gov/education/mea/index.htm.

I look forward to working with you in support of our continued efforts to improve the quality and effectiveness of the instructional opportunities designed to help all students achieve the high standards of the *Learning Results* and demonstrate that achievement through performance on the Maine Educational Assessment.

Sincerely,

Susan A. Gendron
Commissioner of Education



School Report Grade 8

Test Date: March 2008
Code: 11271335
SAU: Pembroke School Department
School: Pembroke Elementary School

Contents of the Report

The report is divided into two main sections including a section describing the students tested and a separate section for the results in each content area.

<i>Topic</i>	<i>Page</i>
Summary of Scores	2
Summary of Student Participation	3
English Language Arts – Reading Results	4-6
Mathematics Results	7-9
Science and Technology Results	10-12

SUMMARY OF SCORES

Test Date: March 2008

Grade: 8

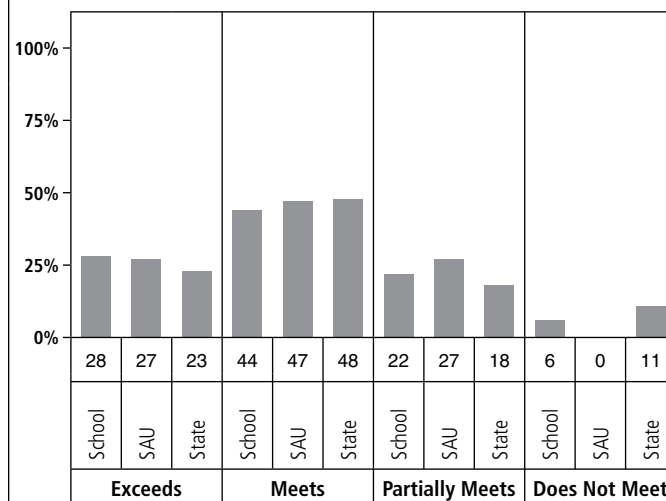
SAU: Pembroke School Department

School: Pembroke Elementary School

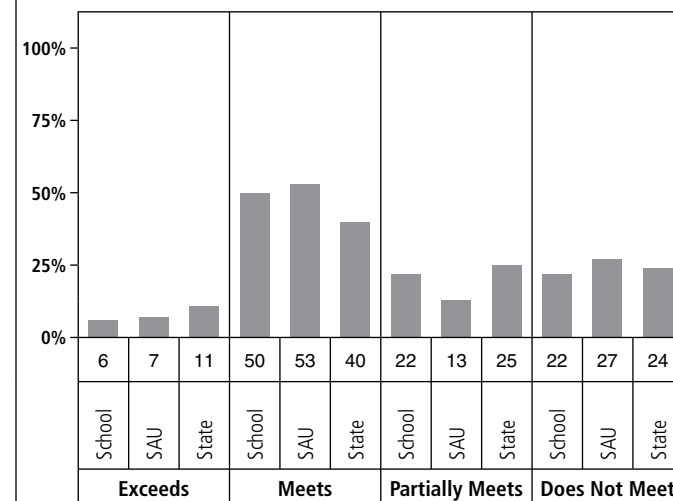
Summary of School, SAU, and State Scores

Year	Average Scaled Score		
	School	SAU	State
ELA – Reading			
2005–2006	837	835	845
2006–2007	849	848	847
2007–2008	851	852	849
Cum. Avg. *	847	847	847
Mathematics			
2005–2006	835	834	840
2006–2007	843	840	842
2007–2008	842	843	841
Cum. Avg. *	840	840	841
Science & Technology			
2005–2006	841	841	846
2006–2007	855	854	847
2007–2008	850	850	847
Cum. Avg. *	849	849	847

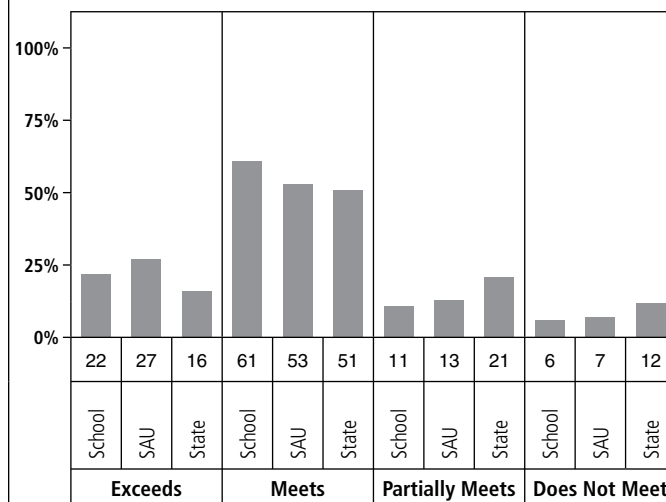
ELA – READING



MATHEMATICS



SCIENCE AND TECHNOLOGY



*Cumulative averages are weighted, i.e., the scaled scores are averaged proportionally based on the numbers of students in each year.

SUMMARY OF STUDENT PARTICIPATION

Test Date: March 2008
Grade: 8
SAU: Pembroke School Department
School: Pembroke Elementary School

CATEGORY OF PARTICIPATION	Enrollment ¹ during testing window						CONTENT AREA PARTICIPATION ²																							
							ELA-Reading						Mathematics						Science and Technology											
	School		SAU		State		School		SAU		State		School		SAU		State		School		SAU		State		School		SAU		State	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total number of students	19	100	16	100	15274	100	19	100	16	100	15102	99	19	100	16	100	15097	99	19	100	16	100	15080	99						
Ethnicity African American/Black	0	0	0	0	368	2	0	0	0	0	356	97	0	0	0	0	360	98	0	0	0	0	356	97						
American Indian or Native Alaskan	1	5	0	0	120	1	1	100	0	0	117	98	1	100	0	0	117	98	1	100	0	0	117	98						
Asian or Pacific Islander	0	0	0	0	186	1	0	0	0	0	181	97	0	0	0	0	182	98	0	0	0	0	182	98						
Hispanic	0	0	0	0	139	1	0	0	0	0	136	98	0	0	0	0	136	98	0	0	0	0	136	98						
Caucasian/White	18	95	16	100	14461	95	18	100	16	100	14312	99	18	100	16	100	14302	99	18	100	16	100	14289	99						
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Identified disability	4	21	3	19	2508	16	4	100	3	100	2446	98	4	100	3	100	2441	98	4	100	3	100	2431	98						
Current LEP	0	0	0	0	327	2	0	0	0	0	316	97	0	0	0	0	322	99	0	0	0	0	322	99						
Economically disadvantaged	9	47	7	44	5420	35	9	100	7	100	5329	99	9	100	7	100	5324	99	9	100	7	100	5313	98						
Migrant	0	0	0	0	7	0	0	0	0	0	7	100	0	0	0	0	7	100	0	0	0	0	7	100						

MODE OF PARTICIPATION ³	ELA-Reading						Mathematics						Science and Technology											
	School		SAU		State		School		SAU		State		School		SAU		State		School		SAU		State	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Participation without accommodations	16	84	14	88	12703	83	16	84	14	88	12694	83	16	84	14	88	12710	83						
Identified disability (PET/IEP)	1	6	1	7	437	3	1	6	1	7	421	3	1	6	1	7	445	4						
LEP	0	0	0	0	172	1	0	0	0	0	172	1	0	0	0	0	173	1						
504 plan	0	0	0	0	229	2	0	0	0	0	231	2	0	0	0	0	230	2						
Participation with accommodations	2	11	1	6	2221	15	2	11	1	6	2227	15	2	11	1	6	2197	14						
Identified disability (PET/IEP)	2	100	1	100	1832	82	2	100	1	100	1844	83	2	100	1	100	1813	83						
LEP	0	0	0	0	136	6	0	0	0	0	143	6	0	0	0	0	142	6						
504 plan	0	0	0	0	68	3	0	0	0	0	66	3	0	0	0	0	66	3						
Other	0	0	0	0	213	10	0	0	0	0	202	9	0	0	0	0	204	9						
Participation through alternate assessment (PAAP)	1	5	1	6	177	1	1	5	1	6	176	1	1	5	1	6	173	1						
Identified disability (PET/IEP)	1	100	1	100	177	100	1	100	1	100	176	100	1	100	1	100	173	100						
LEP	0	0	0	0	7	4	0	0	0	0	7	4	0	0	0	0	7	4						
504 plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Approved non-participation in reading – 1st year LEP	0	0	0	0	1	0																		
Approved non-participation – special consideration	0	0	0	0	32	0	0	0	0	0	34	0	0	0	0	0	34	0						
Non-participation – other	0	0	0	0	140	1	0	0	0	0	143	1	0	0	0	0	160	1						

1 Percents are the percentage of students enrolled in each participation category.

2 Percents are the percentage of students, including those who participated through alternate assessment (PAAP), who participated in the content area.

3 Percents are the percentage of students in each content area by mode.

ELA–READING RESULTS

Test Date: March 2008
Grade: 8
SAU: Pembroke School Department
School: Pembroke Elementary School

ACHIEVEMENT LEVEL DEFINITIONS		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		SAU		State	
		N	%	N	%	N	%
Exceeds the Standards – The student’s work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing in-depth inferences, analyzing texts for subtle clues, synthesizing information across texts, and using his/her knowledge of text features and literary devices to make deeper connections within or across texts to increase comprehension. (scaled score 861–880)	2005-2006	0	0	0	0	2695	17
	2006-2007	1	10	1	11	2407	16
	2007-2008	5	28	4	27	3428	23
	Cum. Total*	6	16	5	16	8530	18
Meets the Standards – The student’s work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing inferences, summarizing main ideas and providing supporting details, connecting ideas within and across texts, and using his/her knowledge of text features and literary devices to increase comprehension. (scaled score 841–860)	2005-2006	4	40	3	38	6830	42
	2006-2007	8	80	7	78	7494	49
	2007-2008	8	44	7	47	7179	48
	Cum. Total*	20	53	17	53	21503	46
Partially Meets the Standards – The student’s work demonstrates an inconsistent ability to read and interpret literary and informational texts appropriate for the grade level. The student’s ability to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, and use his/her knowledge of text features and literary devices varies depending on the texts. (scaled score 829–840)	2005-2006	2	20	1	13	3741	23
	2006-2007	0	0	0	0	3628	24
	2007-2008	4	22	4	27	2706	18
	Cum. Total*	6	16	5	16	10075	22
Does Not Meet the Standards – The student’s work demonstrates a limited ability to read and interpret literary and informational texts appropriate for the grade level. The student’s responses are often vague or incorrect leaving the impression that the student found it difficult to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, or use his/her knowledge of text features and literary devices to support comprehension. (scaled score 800–828)	2005-2006	4	40	4	50	3003	18
	2006-2007	1	10	1	11	1810	12
	2007-2008	1	6	0	0	1611	11
	Cum. Total*	6	16	5	16	6424	14

Learning Results Content Standard Cluster	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		SAU		State	
	N	%	N	%	N	%	N	%
Total Reading Cluster	56	100	37.7	67.3	38.4	68.6	36.9	65.9
Literary Text	28	50	18.6	66.4	18.8	67.1	18.3	65.4
Informational Text	28	50	19.2	68.6	19.6	70.0	18.6	66.4

The Maine *Learning Results* reading cluster includes Content Standards A (Process of Reading), B (Literature and Culture), and D (Informational Texts). The MEA assesses students’ reading skills based on questions related to two types of reading passages: literary and informational. Passages include both long and short texts, selected from developmentally appropriate works. Items on the MEA measure Grade Level Expectations, based on Maine’s 1997 *Learning Results*, which can be found at <http://www.maine.gov/education/lsalt/gles.htm>.

ELA-READING RESULTS

(CONTINUED)

Test Date: March 2008
 Grade: 8
 SAU: Pembroke School Department
 School: Pembroke Elementary School

REPORTING CATEGORIES	School										SAU						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	18	5	28	8	44	4	22	1	6	851	15	27	47	27	0	852	14924	23	48	18	11	849
Ethnicity																						
African American/Black	0										0						348	11	38	22	29	840
American Indian or Native Alaskan	1										0						117	9	43	29	19	842
Asian or Pacific Islander	0										0						179	32	39	18	11	852
Hispanic	0										0						131	18	38	27	17	846
Caucasian/White	17	5	29	8	47	4	24	0	0	853	15	27	47	27	0	852	14149	23	49	18	10	850
Not Reported	0										0						0					
Identified disability																						
Yes	3										2						2269	3	24	32	42	833
No	15	5	33	8	53	2	13	0	0	855	13	31	54	15	0	856	12655	27	52	16	5	852
Current LEP																						
Yes	0										0						308	8	30	27	34	837
No	18	5	28	8	44	4	22	1	6	851	15	27	47	27	0	852	14616	23	48	18	10	850
Economically disadvantaged																						
Yes	8	1	13	5	63	1	13	1	13	848	6	17	67	17	0	851	5222	12	44	25	19	843
No	10	4	40	3	30	3	30	0	0	854	9	33	33	33	0	853	9702	29	50	14	7	853
Migrant																						
Yes	0										0						7	0	86	0	14	850
No	18	5	28	8	44	4	22	1	6	851	15	27	47	27	0	852	14917	23	48	18	11	849
Gender																						
Female	11	5	45	4	36	2	18	0	0	857	10	40	40	20	0	857	7198	30	48	15	7	853
Male	7	0	0	4	57	2	29	1	14	842	5	0	60	40	0	844	7726	17	49	21	14	847
Not Reported	0										0						0					
Title 1A targeted program																						
Yes	1										1						807	9	41	32	18	842
No	17	5	29	8	47	3	18	1	6	852	14	29	50	21	0	854	14117	24	49	17	10	850
Gifted/talented program																						
Yes	0										0						592	71	28	1	0	867
No	18	5	28	8	44	4	22	1	6	851	15	27	47	27	0	852	14332	21	49	19	11	849

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

ELA–READING RESULTS

(QUESTIONNAIRE ITEMS)

Test Date: March 2008
Grade: 8
SAU: Pembroke School Department
School: Pembroke Elementary School

QUESTIONNAIRE ITEMS	School										SAU						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
		%	N	%	N	%	N	%	N			%	%	%	%			%	%	%	%	
How much homework do you do on school nights? A. none B. less than one hour C. one to two hours D. more than two hours	6 59 35 0	0 3 2	0 30 33	1 6 1	100 60 17	0 1 3	0 10 50	0 0 0	0 0 0	852 854 851	7 53 40 0	0 25 33	100 63 17	0 13 50	0 0 0	852 853 851	9 46 41 5	10 20 28 28	39 50 49 44	24 20 15 15	26 11 7 12	841 849 852 850
How well do the questions that you have just been given on this MEA test match what you have learned in school about reading? A. The questions on the test match what I have learned in reading class. B. They match some of what I have learned. C. They match just a little of what I have learned. D. There is no match.	35 53 12 0	2 1 2	33 11 100	3 5 0	50 56 0	1 3 0	17 33 0	0 0 0	0 0 0	858 845 870	40 47 13 0	33 0 100	50 57 0	17 43 0	0 0 0	858 843 870	33 53 11 3	31 21 14 6	48 51 41 34	14 19 25 26	7 9 20 35	853 849 844 836
Which of the following best describes how you rate yourself as a student in reading? A. very good B. good C. fair D. poor	38 38 19 6	2 2 0 0	33 33 0 0	4 2 2 0	67 33 67 0	0 2 1 1	0 33 33 100	0 0 0 0	0 0 0 0	859 851 843 830	36 43 14 7	20 33 0 0	80 33 50 0	0 33 50 100	0 0 0 0	858 851 842 830	31 49 18 2	42 19 5 4	44 54 42 29	8 19 31 32	6 9 22 34	857 849 840 835
How difficult was the reading part of this test? A. harder than my regular schoolwork B. about the same as my regular schoolwork C. easier than my regular schoolwork	6 71 24	0 4 1	0 33 25	1 6 1	100 50 25	0 2 2	0 17 50	0 0 0	0 0 0	846 855 849	7 67 27	0 30 25	100 50 25	0 20 50	0 0 0	846 854 849	15 65 19	16 23 30	44 49 49	22 18 14	18 9 8	845 850 852
How difficult were the reading passages on this test? A. Most of the passages were more difficult than what I normally read. B. Most of the passages were about the same as what I normally read. C. Most of the passages were easier than what I normally read.	6 65 29	0 3 2	0 27 40	1 5 2	100 45 40	0 3 1	0 27 20	0 0 0	0 0 0	846 851 858	0 67 33	 20 40	 50 40	 30 20	 0 0	 849 858	9 53 38	8 17 36	33 51 48	28 21 11	31 11 5	838 848 855
How hard did you try on the reading part of this test? A. I tried harder on this test than I do on my regular schoolwork. B. I tried about the same as I do on my regular schoolwork. C. I did not try as hard on this test as I do on my regular schoolwork.	47 53 0	4 1	50 11	3 5 56	38 56	1 3 3	13 33	0 0 0	0 0 0	857 849	47 53 0	57 0	29 63	14 38	0 0	859 847	43 51 6	23 25 9	48 49 43	19 17 24	10 9 23	849 851 842
How much time do you spend reading at home each day? A. more than one hour B. 20 minutes to an hour C. less than 20 minutes D. I rarely read at home.	24 24 6 47	2 1 1	50 25 100 13	2 2 0 4	50 50 0 50	0 1 0 3	0 25 0 38	0 0 0 0	0 0 0 0	862 853 864 847	27 27 0 47	50 25 14	50 50 43	0 25 43	0 0 0	862 853 847	18 41 13 28	31 28 20 12	47 49 49 47	13 15 18 26	9 7 12 16	852 852 848 844
How do you feel about the following statement? <i>“My knowledge of reading will be useful to me as an adult.”</i> A. strongly agree B. agree C. disagree D. strongly disagree	71 24 6 0	5 0 0	42 0 0	4 3 1	33 75 100	3 1 0	25 25 0	0 0 0	0 0 0	855 846 854	73 20 7 0	36 0 0	36 67 100	27 33 0	0 0 0	854 846 854	43 48 6 2	31 18 11 6	48 50 43 36	14 20 24 32	7 12 21 26	853 848 843 839
Optional school/SAU question A. B. C. D.	0 0 0 0										0 0 0 0											

MATHEMATICS RESULTS

Test Date: March 2008
Grade: 8
SAU: Pembroke School Department
School: Pembroke Elementary School

ACHIEVEMENT LEVEL DEFINITIONS		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		SAU		State	
		N	%	N	%	N	%
Exceeds the Standards – The student’s work demonstrates in-depth understanding of essential concepts in mathematics, including the ability to make multiple connections among central ideas. The student’s responses demonstrate the ability to synthesize information; analyze and solve difficult problems, including developing and implementing strategies, efficiently and accurately performing procedures, and recording and justifying solutions; and explain complex concepts. (scaled score 861–880)	2005-2006	0	0	0	0	1714	11
	2006-2007	1	10	0	0	1952	13
	2007-2008	1	6	1	7	1657	11
	Cum. Total*	2	5	1	3	5323	11
Meets the Standards – The student’s work demonstrates a general understanding of essential concepts in mathematics, including the ability to make connections among central ideas. The student’s responses demonstrate the ability to analyze and solve problems including developing and implementing strategies, to perform procedures, and to record and explain solutions and concepts. The student’s work may contain minor errors. (scaled score 841–860)	2005-2006	3	30	3	38	5533	34
	2006-2007	5	50	5	56	5870	38
	2007-2008	9	50	8	53	5956	40
	Cum. Total*	17	45	16	50	17359	37
Partially Meets the Standards – The student’s work demonstrates incomplete understanding of essential concepts in mathematics and inconsistent connections among central ideas. The student’s responses demonstrate some ability to analyze and solve problems, and explain concepts. Problem solving strategies may be flawed, procedures performed inaccurately, methods not recorded and/or problems not completed. (scaled score 829–840)	2005-2006	4	40	2	25	4764	29
	2006-2007	3	30	3	33	3982	26
	2007-2008	4	22	2	13	3729	25
	Cum. Total*	11	29	7	22	12475	27
Does Not Meet the Standards – The student’s work demonstrates limited understanding of essential concepts in mathematics and infrequent or inaccurate connections among central ideas. The student’s responses demonstrate minimal ability to solve problems and explain concepts. Problem solving strategies and procedures are often flawed or inappropriate and there may be many omissions. (scaled score 800–828)	2005-2006	3	30	3	38	4251	26
	2006-2007	1	10	1	11	3534	23
	2007-2008	4	22	4	27	3579	24
	Cum. Total*	8	21	8	25	11364	24

Learning Results Content Standard Clusters	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		SAU		State	
	N	%	N	%	N	%	N	%
Cluster 1: Numbers and Operations	16	29	7.5	46.9	7.3	45.6	8.4	52.5
Cluster 2: Shape and Size	14	25	5.2	37.1	5.3	37.9	5.9	42.1
Cluster 3: Mathematical Decision Making	8	14	4.8	60.0	5.0	62.5	4.6	57.5
Cluster 4: Patterns	18	32	10.2	56.7	10.7	59.4	8.9	49.4

- Cluster 1: Numbers and Operations**
A. Numbers and Number Sense
B. Computation
I. Discrete Mathematics (grades 3 and 4 only)
- Cluster 2: Shape and Size**
E. Geometry
F. Measurement
- Cluster 3: Mathematical Decision Making**
C. Data Analysis and Statistics
D. Probability
- Cluster 4: Patterns**
G. Patterns, Relations, and Functions
H. Algebra Concepts
K. Mathematical Communication

Each content standard in the clusters above is defined in Maine’s 1997 *Learning Results*, which are the basis for Grade Level Expectations. Each item on the MEA measures a grade level expectation, which can be found at <http://www.maine.gov/education/lsalt/gles.htm>.

MATHEMATICS RESULTS

(CONTINUED)

Test Date: March 2008
 Grade: 8
 SAU: Pembroke School Department
 School: Pembroke Elementary School

REPORTING CATEGORIES	School										SAU						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	18	1	6	9	50	4	22	4	22	842	15	7	53	13	27	843	14921	11	40	25	24	841
Ethnicity																						
African American/Black	0										0						352	2	23	23	52	828
American Indian or Native Alaskan	1										0						117	5	22	33	39	832
Asian or Pacific Islander	0										0						181	24	42	20	14	848
Hispanic	0										0						131	7	34	26	33	836
Caucasian/White	17	1	6	9	53	3	18	4	24	842	15	7	53	13	27	843	14140	11	41	25	23	841
Not Reported	0										0						0					
Identified disability																						
Yes	3										2						2265	1	14	22	62	824
No	15	1	7	9	60	3	20	2	13	845	13	8	62	15	15	845	12656	13	45	26	17	844
Current LEP																						
Yes	0										0						315	5	24	20	51	828
No	18	1	6	9	50	4	22	4	22	842	15	7	53	13	27	843	14606	11	40	25	23	841
Economically disadvantaged																						
Yes	8	1	13	3	38	3	38	1	13	843	6	17	33	33	17	844	5217	5	30	29	37	834
No	10	0	0	6	60	1	10	3	30	841	9	0	67	0	33	841	9704	15	45	23	17	845
Migrant																						
Yes	0										0						7	0	43	43	14	838
No	18	1	6	9	50	4	22	4	22	842	15	7	53	13	27	843	14914	11	40	25	24	841
Gender																						
Female	11	1	9	6	55	3	27	1	9	845	10	10	60	20	10	846	7199	11	40	26	23	841
Male	7	0	0	3	43	1	14	3	43	836	5	0	40	0	60	835	7722	11	40	24	25	841
Not Reported	0										0						0					
Title 1A targeted program																						
Yes	1										1						806	3	20	30	47	831
No	17	1	6	9	53	4	24	3	18	843	14	7	57	14	21	844	14115	12	41	25	23	842
Gifted/talented program																						
Yes	0										0						592	58	39	2	1	864
No	18	1	6	9	50	4	22	4	22	842	15	7	53	13	27	843	14329	9	40	26	25	840

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

MATHEMATICS RESULTS

(QUESTIONNAIRE ITEMS)

Test Date: March 2008
 Grade: 8
 SAU: Pembroke School Department
 School: Pembroke Elementary School

QUESTIONNAIRE ITEMS	School										SAU						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	6	0	0	0	0	0	0	1	100	828	7	0	0	0	100	828	9	5	30	23	41	833
B. less than one hour	59	1	10	5	50	2	20	2	20	844	53	13	50	13	25	845	46	10	40	26	25	840
C. one to two hours	35	0	0	4	67	1	17	1	17	842	40	0	67	17	17	842	41	14	42	25	19	843
D. more than two hours	0										0						5	14	38	23	24	842
How well do the questions that you have just been given on this MEA test match what you have learned in school about mathematics?																						
A. The questions on the test match what I have learned in mathematics class.	29	1	20	3	60	0	0	1	20	848	27	25	50	0	25	849	30	17	43	22	18	845
B. They match some of what I have learned.	59	0	0	6	60	2	20	2	20	842	67	0	60	20	20	842	50	10	42	26	22	841
C. They match just a little of what I have learned.	12	0	0	0	0	1	50	1	50	828	7	0	0	0	100	820	17	6	32	29	33	836
D. There is no match.	0										0						4	3	18	25	54	828
Which of the following best describes how you rate yourself as a student in mathematics?																						
A. very good	24	0	0	4	100	0	0	0	0	852	20	0	100	0	0	853	26	29	46	14	11	851
B. good	41	1	14	3	43	1	14	2	29	843	47	14	43	14	29	843	45	7	46	27	20	841
C. fair	35	0	0	2	33	2	33	2	33	836	33	0	40	20	40	836	23	1	26	34	38	833
D. poor	0										0						5	1	14	29	57	827
How difficult was the mathematics part of this test?																						
A. harder than my regular schoolwork	41	0	0	4	57	1	14	2	29	840	40	0	67	0	33	841	34	4	35	28	32	836
B. about the same as my regular schoolwork	59	1	10	5	50	2	20	2	20	844	60	11	44	22	22	844	52	10	43	26	21	842
C. easier than my regular schoolwork	0										0						13	33	40	14	13	852
How hard did you try on the mathematics part of this test?																						
A. I tried harder on this test than I do on my regular schoolwork.	35	1	17	3	50	0	0	2	33	842	33	20	40	0	40	841	44	10	40	26	25	840
B. I tried about the same as I do on my regular schoolwork.	65	0	0	6	55	3	27	2	18	843	67	0	60	20	20	843	50	13	42	24	21	843
C. I did not try as hard on this test as I do on my regular schoolwork.	0										0						6	9	27	27	38	835
How often do you use laptops in mathematics class?																						
A. almost every day	0										0						9	6	38	27	29	837
B. two or three days a week	19	0	0	3	100	0	0	0	0	847	14	0	100	0	0	847	16	8	38	27	27	839
C. two or three times each month	31	0	0	3	60	1	20	1	20	839	36	0	60	20	20	839	28	12	41	27	21	843
D. never or almost never	50	1	13	3	38	1	13	3	38	843	50	14	43	0	43	844	48	13	40	23	24	842
How often do you use calculators in mathematics class?																						
A. almost every day	65	0	0	7	64	2	18	2	18	843	67	0	70	10	20	843	38	14	42	23	21	843
B. two or three times a week	29	1	20	1	20	1	20	2	40	839	27	25	0	25	50	837	33	10	41	26	23	841
C. two or three times each month	6	0	0	1	100	0	0	0	0	858	7	0	100	0	0	858	18	10	36	27	27	840
D. never or almost never	0										0						11	7	34	26	33	836
How do you feel about the following statement? <i>"My knowledge of mathematics will be useful to me as an adult."</i>																						
A. strongly agree	47	1	13	7	88	0	0	0	0	851	47	14	86	0	0	852	54	14	44	23	18	844
B. agree	41	0	0	2	29	2	29	3	43	836	40	0	33	17	50	836	38	8	36	27	28	838
C. disagree	12	0	0	0	0	1	50	1	50	829	13	0	0	50	50	829	6	6	31	28	36	835
D. strongly disagree	0										0						2	3	23	25	49	831
Optional school/SAU question																						
A.	0										0											
B.	0										0											
C.	0										0											
D.	0										0											

SCIENCE AND TECHNOLOGY RESULTS

Test Date: March 2008
Grade: 8
SAU: Pembroke School Department
School: Pembroke Elementary School

ACHIEVEMENT LEVEL DEFINITIONS		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		SAU		State	
		N	%	N	%	N	%
Exceeds the Standards – The student’s work demonstrates in-depth understanding of essential concepts in science, including the ability to make multiple connections among central ideas. The student’s responses demonstrate the ability to synthesize information, analyze and solve difficult problems using the processes of scientific inquiry, and explain complex concepts using evidence and proper terminology to support and communicate logical conclusions. (scaled score 861–880)	2005-2006	0	0	0	0	1879	12
	2006-2007	3	30	2	22	2192	14
	2007-2008	4	22	4	27	2371	16
	Cum. Total*	7	18	6	19	6442	14
Meets the Standards – The student’s work demonstrates a general understanding of essential concepts in science, including the ability to make connections among central ideas. The student’s responses demonstrate the ability to analyze and solve routine problems using the processes of scientific inquiry and explain central concepts with sufficient clarity and accuracy to demonstrate general understanding. (scaled score 841–860)	2005-2006	5	50	3	38	8604	53
	2006-2007	6	60	6	67	7916	52
	2007-2008	11	61	8	53	7630	51
	Cum. Total*	22	58	17	53	24150	52
Partially Meets the Standards – The student’s work demonstrates incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student’s responses demonstrate some ability to analyze and solve problems using scientific inquiry but the quality of responses is inconsistent. Explanation of concepts may be incomplete or unclear. (scaled score 831–840)	2005-2006	4	40	4	50	3618	22
	2006-2007	1	10	1	11	3340	22
	2007-2008	2	11	2	13	3175	21
	Cum. Total*	7	18	7	22	10133	22
Does Not Meet the Standards – The student’s work demonstrates limited understanding of essential concepts in science and infrequent or inaccurate connections among central ideas. The student’s responses demonstrate minimal ability to solve problems and use the skills of scientific inquiry. There are many inaccuracies and explanations are illogical, incomplete, or missing. (scaled score 800–830)	2005-2006	1	10	1	13	2174	13
	2006-2007	0	0	0	0	1865	12
	2007-2008	1	6	1	7	1731	12
	Cum. Total*	2	5	2	6	5770	12

Learning Results Content Standard Clusters	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		SAU		State	
	N	%	N	%	N	%	N	%
Cluster 1: Life Sciences	14	25	8.4	60.0	8.5	60.7	8.1	57.9
Cluster 2: Physical Sciences	14	25	8.5	60.7	8.6	61.4	7.3	52.1
Cluster 3: Earth and Space Sciences	14	25	8.4	60.0	8.3	59.3	7.7	55.0
Cluster 4: Nature and Implications of Science	14	25	8.5	60.7	8.2	58.6	8.5	60.7

Cluster 1: Life Sciences

- A. Classifying Life Forms
- B. Ecology
- C. Cells

Cluster 2: Physical Sciences

- E. Structure of Matter
- H. Energy
- I. Motion

Cluster 3: Earth and Space Sciences

- D. Continuity and Change
- F. The Earth
- G. The Universe

Cluster 4: Nature and Implications of Science

- J. Inquiry and Problem Solving
- K. Scientific Reasoning
- L. Communication
- M. Implications of Science & Technology

Each content standard in the clusters shown is defined in Maine’s 1997 *Learning Results*, which are the basis for science and technology Grade Span Expectations. Each item on the MEA measures a grade span expectation, which can be found at <http://www.maine.gov/education/lslat/gles.htm>.

SCIENCE AND TECHNOLOGY RESULTS

(CONTINUED)

Test Date: March 2008
 Grade: 8
 SAU: Pembroke School Department
 School: Pembroke Elementary School

REPORTING CATEGORIES	School										SAU						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	18	4	22	11	61	2	11	1	6	850	15	27	53	13	7	850	14907	16	51	21	12	847
Ethnicity																						
African American/Black	0										0						349	4	35	26	34	837
American Indian or Native Alaskan	1										0						117	8	40	28	24	840
Asian or Pacific Islander	0										0						181	20	50	15	15	849
Hispanic	0										0						131	5	50	22	23	842
Caucasian/White	17	4	24	10	59	2	12	1	6	851	15	27	53	13	7	850	14129	16	52	21	11	848
Not Reported	0										0						0					
Identified disability																						
Yes	3										2						2258	3	29	31	37	836
No	15	4	27	9	60	2	13	0	0	853	13	31	54	15	0	852	12649	18	55	20	7	850
Current LEP																						
Yes	0										0						315	4	29	25	42	834
No	18	4	22	11	61	2	11	1	6	850	15	27	53	13	7	850	14592	16	52	21	11	848
Economically disadvantaged																						
Yes	8	2	25	5	63	1	13	0	0	850	6	33	50	17	0	850	5206	8	45	28	20	842
No	10	2	20	6	60	1	10	1	10	850	9	22	56	11	11	849	9701	20	55	18	7	850
Migrant																						
Yes	0										0						7	29	57	14	0	852
No	18	4	22	11	61	2	11	1	6	850	15	27	53	13	7	850	14900	16	51	21	12	847
Gender																						
Female	11	3	27	7	64	1	9	0	0	853	10	30	60	10	0	852	7196	14	52	23	12	847
Male	7	1	14	4	57	1	14	1	14	846	5	20	40	20	20	844	7711	18	51	20	12	848
Not Reported	0										0						0					
Title 1A targeted program																						
Yes	1										1						804	6	38	34	22	841
No	17	4	24	10	59	2	12	1	6	851	14	29	50	14	7	850	14103	16	52	21	11	848
Gifted/talented program																						
Yes	0										0						592	63	35	1	0	865
No	18	4	22	11	61	2	11	1	6	850	15	27	53	13	7	850	14315	14	52	22	12	847

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

SCIENCE AND TECHNOLOGY RESULTS

(QUESTIONNAIRE ITEMS)

Test Date: March 2008

Grade: 8

SAU: Pembroke School Department

School: Pembroke Elementary School

QUESTIONNAIRE ITEMS	School										SAU						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	6	0	0	1	100	0	0	0	0	848	7	0	100	0	0	848	9	10	40	26	23	842
B. less than one hour	59	2	20	6	60	1	10	1	10	851	53	25	50	13	13	849	46	14	52	22	12	847
C. one to two hours	35	2	33	3	50	1	17	0	0	851	40	33	50	17	0	851	41	19	53	19	9	849
D. more than two hours	0										0						5	19	47	21	14	848
How well do the questions that you have just been given on this MEA test match what you have learned in school about science?																						
A. The questions on the test match what I have learned in science class.	47	2	25	5	63	1	13	0	0	854	40	33	50	17	0	852	29	19	54	19	9	849
B. They match some of what I have learned.	41	1	14	5	71	1	14	0	0	849	47	14	71	14	0	849	49	16	51	22	11	848
C. They match just a little of what I have learned.	12	1	50	0	0	0	0	1	50	845	13	50	0	0	50	845	18	13	51	23	13	846
D. There is no match.	0										0						5	9	39	29	23	842
Which of the following best describes how you rate yourself as a student in science?																						
A. very good	31	2	40	2	40	1	20	0	0	853	36	40	40	20	0	853	23	28	51	13	8	853
B. good	50	2	25	5	63	1	13	0	0	852	43	33	50	17	0	850	54	15	55	21	9	848
C. fair	19	0	0	2	67	0	0	1	33	839	21	0	67	0	33	839	20	5	45	32	18	842
D. poor	0										0						3	2	35	34	29	838
How difficult was the science part of this test?																						
A. harder than my regular schoolwork	29	3	60	0	0	1	20	1	20	851	33	60	0	20	20	851	27	15	49	22	14	846
B. about the same as my regular schoolwork	71	1	8	10	83	1	8	0	0	850	67	10	80	10	0	849	59	15	53	22	10	848
C. easier than my regular schoolwork	0										0						13	21	51	18	10	850
How hard did you try on the science part of this test?																						
A. I tried harder on this test than I do on my regular schoolwork.	35	2	33	2	33	1	17	1	17	852	33	40	20	20	20	851	40	15	51	22	12	847
B. I tried about the same as I do on my regular schoolwork.	65	2	18	8	73	1	9	0	0	850	67	20	70	10	0	849	55	17	53	21	10	848
C. I did not try as hard on this test as I do on my regular schoolwork.	0										0						5	12	41	25	22	843
Which courses do you plan to take before you graduate from high school?																						
A. earth and space science and/or biology	31	1	20	2	40	1	20	1	20	847	29	25	25	25	25	845	25	11	53	23	13	846
B. the course(s) described in A, plus chemistry	19	0	0	2	67	1	33	0	0	847	14	0	50	50	0	841	24	18	53	20	10	849
C. the course(s) described in B, plus physics	13	0	0	2	100	0	0	0	0	849	14	0	100	0	0	849	22	30	47	14	8	853
D. a life science and physical science class	38	3	50	3	50	0	0	0	0	855	43	50	50	0	0	855	29	8	52	27	14	844
How do you feel about the following statement? <i>"My knowledge of science and technology will be useful to me as an adult."</i>																						
A. strongly agree	35	3	50	2	33	1	17	0	0	854	40	50	33	17	0	854	27	23	51	17	9	851
B. agree	53	0	0	7	78	1	11	1	11	848	47	0	71	14	14	846	54	15	53	21	11	847
C. disagree	12	1	50	1	50	0	0	0	0	852	13	50	50	0	0	852	15	10	50	26	14	845
D. strongly disagree	0										0						4	7	39	30	24	841
How well does the following statement reflect your future goals? <i>"I am interested in a career related to science, technology, engineering, or mathematics."</i>																						
A. strongly agree	12	1	50	0	0	1	50	0	0	851	13	50	0	50	0	851	25	24	52	15	8	851
B. agree	41	1	14	5	71	1	14	0	0	850	47	14	71	14	0	850	37	15	50	22	12	847
C. disagree	47	2	25	5	63	0	0	1	13	851	40	33	50	0	17	849	26	12	53	23	12	846
D. strongly disagree	0										0						12	8	48	28	15	844
Optional school/SAU question																						
A.	0										0											
B.	0										0											
C.	0										0											
D.	0										0											

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

N = Number